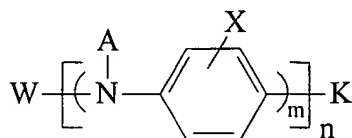


In the claims:

1. (Original) A method of inhibiting the growth of tumor cells in a tumor site of a subject, comprising administering to the tumor site an effective amount of an oligoaniline having the following formula:



wherein

m is an integer of 1-6;

n is an integer of 1-10;

each A is -H, -Z, -CH<sub>2</sub>-CO-OH, -CH<sub>2</sub>-CO-O-Z, -CH<sub>2</sub>-CO-S-Z, -CH<sub>2</sub>-CO-NH<sub>2</sub>, or -CH<sub>2</sub>-CO-NH-Z; and each X is -H, -O-Z, -S-Z, -NH-Z; Z being -E-D, wherein E is -R-, -R-Ar-, -Ar-R-, or -Ar-; and D is -OH, -SH, -NH<sub>2</sub>, -NHOH, -SO<sub>3</sub>H, -OSO<sub>3</sub>H, -CO<sub>2</sub>H, -CONH<sub>2</sub>, -CH(NH<sub>2</sub>)-CO<sub>2</sub>H, -P(OH)<sub>3</sub>, -PO(OH)<sub>2</sub>, -O-PO(OH)<sub>2</sub>, -O-PO(OH)-O-PO(OH)<sub>2</sub>, -O-PO(O<sup>-</sup>)-O-CH<sub>2</sub>CH<sub>2</sub>NH<sub>3</sub><sup>+</sup>, -glycoside, -OCH<sub>3</sub>, -OCH<sub>2</sub>(CHOH)<sub>4</sub>-CH<sub>2</sub>OH, -OCH<sub>2</sub>(CHOH)<sub>2</sub>-CH<sub>2</sub>OH, -C<sub>6</sub>H<sub>3</sub>(OH)<sub>2</sub>, -NH<sub>3</sub><sup>+</sup>, -N<sup>+</sup>H<sub>2</sub>R<sub>b</sub>, -N<sup>+</sup>HR<sub>b</sub>R<sub>c</sub>, or -N<sup>+</sup>R<sub>b</sub>R<sub>c</sub>R<sub>d</sub>, each of R, R<sub>b</sub>, R<sub>c</sub>, and R<sub>d</sub>, independently, being C<sub>1-30</sub> alkyl; and Ar being aryl;

W is -H, -CO-B, -CH<sub>2</sub>CH(OH)-B, -CO-NH-B, -CS-NH-B, -CO-O-B, CO-CH<sub>2</sub>-CH(CO<sub>2</sub>H)-B, -CH<sub>2</sub>-B, -SO<sub>2</sub>-B, wherein B is -R<sub>1</sub>-O-[Si(CH<sub>3</sub>)<sub>2</sub>-O-]<sub>1-100</sub>, C<sub>1-2000</sub> alkyl, C<sub>6-40</sub> aryl, C<sub>7-60</sub> alkylaryl, C<sub>7-60</sub> arylalkyl, (C<sub>1-30</sub> alkyl ether)<sub>1-100</sub>, (C<sub>6-40</sub> aryl ether)<sub>1-100</sub>, (C<sub>7-60</sub> alkylaryl ether)<sub>1-100</sub>, (C<sub>7-60</sub> arylalkyl ether)<sub>1-100</sub>, (C<sub>1-30</sub> alkyl thioether)<sub>1-100</sub>, (C<sub>6-40</sub> aryl thioether)<sub>1-100</sub>, (C<sub>7-60</sub> alkylaryl thioether)<sub>1-100</sub>, (C<sub>7-60</sub> arylalkyl thioether)<sub>1-100</sub>, (C<sub>2-50</sub> alkyl ester)<sub>1-100</sub>, (C<sub>7-60</sub> aryl ester)<sub>1-100</sub>, (C<sub>8-70</sub> alkylaryl ester)<sub>1-100</sub>, (C<sub>8-70</sub> arylalkyl ester)<sub>1-100</sub>, -R<sub>1</sub>-CO-O-(C<sub>1-30</sub> alkyl ether)<sub>1-100</sub>, -R<sub>1</sub>-CO-O-(C<sub>6-40</sub> aryl ether)<sub>1-100</sub>, -R<sub>1</sub>-CO-O-(C<sub>7-60</sub> alkylaryl ether)<sub>1-100</sub>, -R<sub>1</sub>-CO-O-(C<sub>7-60</sub> arylalkyl ether)<sub>1-100</sub>, (C<sub>4-50</sub> alkyl urethane)<sub>1-100</sub>, (C<sub>14-60</sub> aryl urethane)<sub>1-100</sub>, (C<sub>10-80</sub> alkylaryl urethane)<sub>1-100</sub>, (C<sub>10-80</sub> arylalkyl urethane)<sub>1-100</sub>, (C<sub>5-50</sub> alkyl urea)<sub>1-100</sub>, (C<sub>14-60</sub> aryl urea)<sub>1-100</sub>, (C<sub>10-80</sub> alkylaryl urea)<sub>1-100</sub>, (C<sub>10-80</sub> arylalkyl urea)<sub>1-100</sub>, (C<sub>2-50</sub> alkyl amide)<sub>1-100</sub>, (C<sub>7-60</sub> aryl amide)<sub>1-100</sub>, (C<sub>8-70</sub> alkylaryl amide)<sub>1-100</sub>, (C<sub>8-70</sub> arylalkyl amide)<sub>1-100</sub>, (C<sub>3-30</sub> alkyl anhydride)<sub>1-100</sub>, (C<sub>8-50</sub> aryl anhydride)<sub>1-100</sub>, (C<sub>9-60</sub>

alkylaryl anhydride)<sub>1-100</sub>, (C<sub>9-60</sub> arylalkyl anhydride)<sub>1-100</sub>, (C<sub>2-30</sub> alkyl carbonate)<sub>1-100</sub>, (C<sub>7-50</sub> aryl carbonate)<sub>1-100</sub>, (C<sub>8-60</sub> alkylaryl carbonate)<sub>1-100</sub>, (C<sub>8-60</sub> arylalkyl carbonate)<sub>1-100</sub>, -R<sub>1</sub>-O-CO-NH-(R<sub>2</sub> or Ar-R<sub>2</sub>-Ar)-NH-CO-O-(C<sub>1-30</sub> alkyl ether, C<sub>6-40</sub> aryl ether, C<sub>7-60</sub> alkylaryl ether, or C<sub>7-60</sub> arylalkyl ether)<sub>1-100</sub>, -R<sub>1</sub>-O-CO-NH-(R<sub>2</sub> or Ar-R<sub>2</sub>-Ar)-NH-CO-O-(C<sub>2-50</sub> alkyl ester, C<sub>7-60</sub> aryl ester, C<sub>8-70</sub> alkylaryl ester, or C<sub>8-70</sub> arylalkyl ester)<sub>1-100</sub>, -R<sub>1</sub>-O-CO-NH-(R<sub>2</sub> or Ar-R<sub>2</sub>-Ar)-NH-CO-O-(C<sub>1-30</sub> alkyl ether, C<sub>6-40</sub> aryl ether, C<sub>7-60</sub> alkylaryl ether, or C<sub>7-60</sub> arylalkyl ether)<sub>1-100</sub>-CO-NH-(R<sub>2</sub> or Ar-R<sub>2</sub>-Ar)-NH-CO-O-, -R<sub>1</sub>-O-CO-NH-(R<sub>2</sub> or Ar-R<sub>2</sub>-Ar)-NH-CO-O-(C<sub>2-50</sub> alkyl ester, C<sub>7-60</sub> aryl ester, C<sub>8-70</sub> alkylaryl ester, or C<sub>8-70</sub> arylalkyl ester)<sub>1-100</sub>-R<sub>3</sub>-O-CO-NH-(R<sub>2</sub> or Ar-R<sub>2</sub>-Ar)-NH-CO-O-, -R<sub>1</sub>-NH-CO-NH-(R<sub>2</sub> or Ar-R<sub>2</sub>-Ar)-NH-CO-O-(C<sub>1-30</sub> alkyl ether, C<sub>6-40</sub> aryl ether, C<sub>7-60</sub> alkylaryl ether, or C<sub>7-60</sub> arylalkyl ether)<sub>1-100</sub>, -R<sub>1</sub>-NH-CO-NH-(R<sub>2</sub> or Ar-R<sub>2</sub>-Ar)-NH-CO-(C<sub>2-50</sub> alkyl ester, C<sub>7-60</sub> aryl ester, C<sub>8-70</sub> alkylaryl ester, or C<sub>8-70</sub> arylalkyl ester)<sub>1-100</sub>, -R<sub>1</sub>-NH-CO-NH-(R<sub>2</sub> or Ar-R<sub>2</sub>-Ar)-NH-CO-O-(C<sub>1-30</sub> alkyl ether, C<sub>6-40</sub> aryl ether, C<sub>7-60</sub> alkylaryl ether, or C<sub>7-60</sub> arylalkyl ether)<sub>1-100</sub>-CO-NH-(R<sub>2</sub> or Ar-R<sub>2</sub>-Ar)-NH-CO-O-, -R<sub>1</sub>-NH-CO-NH-(R<sub>2</sub> or Ar-R<sub>2</sub>-Ar)-NH-CO-O-(C<sub>2-50</sub> alkyl ester, C<sub>7-60</sub> aryl ester, C<sub>8-70</sub> alkylaryl ester, or C<sub>8-70</sub> arylalkyl ester)<sub>1-100</sub>-R<sub>3</sub>O-CO-NH-(R<sub>2</sub> or Ar-R<sub>2</sub>-Ar)-NH-CO-O-, -R<sub>1</sub>-O-CO-NH-(R<sub>2</sub> or Ar-R<sub>2</sub>-Ar)-NH-CO-NH-(C<sub>2-50</sub> alkyl amide, C<sub>7-60</sub> aryl amide, C<sub>8-70</sub> alkylaryl amide, or C<sub>8-70</sub> arylalkyl amide)<sub>1-100</sub>, or -R<sub>1</sub>-NH-CO-NH-(R<sub>2</sub> or Ar-R<sub>2</sub>-Ar)-NH-CO-NH-(C<sub>2-50</sub> alkyl amide, C<sub>7-60</sub> aryl amide, C<sub>8-70</sub> alkylaryl amide, or C<sub>8-70</sub> arylalkyl amide)<sub>1-100</sub>; wherein each of R<sub>1</sub>, R<sub>2</sub>, and R<sub>3</sub>, independently, is C<sub>1-30</sub> alkyl; and Ar is aryl;

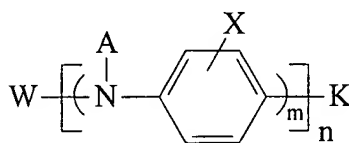
K is -H, -[N(X)-C<sub>6</sub>H<sub>4</sub>]<sub>1-3</sub>-NH<sub>2</sub>, -[N(X)-C<sub>6</sub>H<sub>4</sub>]<sub>1-3</sub>-NH-C(=S)-SH, -[N(X)-C<sub>6</sub>H<sub>4</sub>]<sub>1-3</sub>-N=CH-Ar-SH, or -[N(X)-C<sub>6</sub>H<sub>4</sub>]<sub>1-3</sub>-NH-CO-Ar-SH, wherein X is -H, -Z, -CH<sub>2</sub>-CO-OH, -CH<sub>2</sub>-CO-O-Z, -CH<sub>2</sub>-CO-S-Z, -CH<sub>2</sub>-CO-NH<sub>2</sub> or -CH<sub>2</sub>-CO-NH-Z; and Ar is aryl;

and subsequently exposing the tumor site to irradiation.

2. (Original) The method of claim 1, wherein A is -Z, -CH<sub>2</sub>-CO-O-Z, -CH<sub>2</sub>-CO-S-Z, or -CH<sub>2</sub>-CO-NH-Z; wherein E is -R- or -R-Ar-; and D is -OH, -SH, -NH<sub>2</sub>, -NHOH, -SO<sub>3</sub>H, -OSO<sub>3</sub>H, -CO<sub>2</sub>H, -CONH<sub>2</sub>, -CH(NH<sub>2</sub>)-CO<sub>2</sub>H, -P(OH)<sub>3</sub>, -PO(OH)<sub>2</sub>, -O-PO(OH)<sub>2</sub>, -O-PO(OH)-O-PO(OH)<sub>2</sub>, or -NH<sub>3</sub><sup>+</sup>.

3. (Original) The method of claim 1, wherein m is an integer of 2-6.
4. (Original) The method of claim 1, wherein n is an integer of 1-6.
5. (Original) The method of claim 2, wherein A is -Z, Z being -E-D, wherein E is -R-, or -R-Ar-; and D is -OH, -SH, -NH<sub>2</sub>, -NHOH, -SO<sub>3</sub>H, -OSO<sub>3</sub>H, -CO<sub>2</sub>H, -CONH<sub>2</sub>, -P(OH)<sub>3</sub>, -PO(OH)<sub>2</sub>, -O-PO(OH)<sub>2</sub>, -O-PO(OH)-O-PO(OH)<sub>2</sub>, or -NH<sub>3</sub><sup>+</sup>.
6. (Original) The method of claim 2, wherein n is an integer of 1-6.
7. (Original) The method of claim 2, wherein m is an integer of 2-6.
8. (Original) The method of claim 6, wherein m is an integer of 2-6.
9. (Original) The method of claim 5, wherein E is -R-; and D is -SO<sub>3</sub>H, -OSO<sub>3</sub>H, -CO<sub>2</sub>H, -O-PO(OH)<sub>2</sub>, or -O-PO(OH)-O-PO(OH)<sub>2</sub>.
10. (Original) The method of claim 5, wherein m is an integer of 2-6.
11. (Original) The method of claim 5, wherein n is an integer of 1-6.
12. (Original) The method of claim 9, wherein E is -C<sub>3</sub>H<sub>6</sub>-; D is -SO<sub>3</sub>H; n is an integer of 1-6; and m is an integer of 2-6.
13. (Original) The method of claim 12, wherein m is 4.
14. (Original) The method of claim 13, wherein each of W, X, and K is H.
15. (Original) The method of claim 3, wherein m is 4.

16. (Original) The method of claim 3, wherein n is an integer of 1-6.
17. (Original) The method of claim 15, wherein n is an integer of 1-6.
18. (Original) A pharmaceutical composition for inhibiting the growth of tumor cells, comprising a compound of the following formula:



wherein

m is an integer of 1-6;

n is an integer of 1-10;

each A is -H, -Z, -CH<sub>2</sub>-CO-OH, -CH<sub>2</sub>-CO-O-Z, -CH<sub>2</sub>-CO-S-Z, -CH<sub>2</sub>-CO-NH<sub>2</sub>, or -CH<sub>2</sub>-CO-NH-Z; and each X is -H, -O-Z, -S-Z, -NH-Z; Z being -E-D, wherein E is -R-, -R-Ar-, -Ar-R-, or -Ar-; and D is -OH, -SH, -NH<sub>2</sub>, -NHOH, -SO<sub>3</sub>H, -OSO<sub>3</sub>H, -CO<sub>2</sub>H, -CONH<sub>2</sub>, -CH(NH<sub>2</sub>)-CO<sub>2</sub>H, -P(OH)<sub>3</sub>, -PO(OH)<sub>2</sub>, -O-PO(OH)<sub>2</sub>, -O-PO(OH)-O-PO(OH)<sub>2</sub>, -O-PO(O<sup>-</sup>)-O-CH<sub>2</sub>CH<sub>2</sub>NH<sub>3</sub><sup>+</sup>, -glycoside, -OCH<sub>3</sub>, -OCH<sub>2</sub>(CHOH)<sub>4</sub>-CH<sub>2</sub>OH, -OCH<sub>2</sub>(CHOH)<sub>2</sub>-CH<sub>2</sub>OH, -C<sub>6</sub>H<sub>3</sub>(OH)<sub>2</sub>, -NH<sub>3</sub><sup>+</sup>, -N<sup>+</sup>H<sub>2</sub>R<sub>b</sub>, -N<sup>+</sup>HR<sub>b</sub>R<sub>c</sub>, or -N<sup>+</sup>R<sub>b</sub>R<sub>c</sub>R<sub>d</sub>, each of R, R<sub>b</sub>, R<sub>c</sub>, and R<sub>d</sub>, independently, being C<sub>1-30</sub> alkyl; and Ar being aryl;

W is -H, -CO-B, -CH<sub>2</sub>CH(OH)-B, -CO-NH-B, -CS-NH-B, -CO-O-B, CO-CH<sub>2</sub>-CH(CO<sub>2</sub>H)-B, -CH<sub>2</sub>-B, -SO<sub>2</sub>-B, wherein B is -R<sub>1</sub>-O-[Si(CH<sub>3</sub>)<sub>2</sub>-O-]<sub>1-100</sub>, C<sub>1-2000</sub> alkyl, C<sub>6-40</sub> aryl, C<sub>7-60</sub> alkylaryl, C<sub>7-60</sub> arylalkyl, (C<sub>1-30</sub> alkyl ether)<sub>1-100</sub>, (C<sub>6-40</sub> aryl ether)<sub>1-100</sub>, (C<sub>7-60</sub> alkylaryl ether)<sub>1-100</sub>, (C<sub>7-60</sub> arylalkyl ether)<sub>1-100</sub>, (C<sub>1-30</sub> alkyl thioether)<sub>1-100</sub>, (C<sub>6-40</sub> aryl thioether)<sub>1-100</sub>, (C<sub>7-60</sub> alkylaryl thioether)<sub>1-100</sub>, (C<sub>7-60</sub> arylalkyl thioether)<sub>1-100</sub>, (C<sub>2-50</sub> alkyl ester)<sub>1-100</sub>, (C<sub>7-60</sub> aryl ester)<sub>1-100</sub>, (C<sub>8-70</sub> alkylaryl ester)<sub>1-100</sub>, (C<sub>8-70</sub> arylalkyl ester)<sub>1-100</sub>, -R<sub>1</sub>-CO-O-(C<sub>1-30</sub> alkyl ether)<sub>1-100</sub>, -R<sub>1</sub>-CO-O-(C<sub>6-40</sub> aryl ether)<sub>1-100</sub>, -R<sub>1</sub>-CO-O-(C<sub>7-60</sub> alkylaryl ether)<sub>1-100</sub>, -R<sub>1</sub>-CO-O-(C<sub>7-60</sub> arylalkyl ether)<sub>1-100</sub>, (C<sub>4-50</sub> alkyl urethane)<sub>1-100</sub>, (C<sub>14-60</sub> aryl urethane)<sub>1-100</sub>, (C<sub>10-80</sub> alkylaryl urethane)<sub>1-100</sub>, (C<sub>10-80</sub> arylalkyl urethane)<sub>1-100</sub>, (C<sub>5-50</sub> alkyl urea)<sub>1-100</sub>, (C<sub>14-60</sub> aryl urea)<sub>1-100</sub>, (C<sub>10-80</sub> alkylaryl urea)<sub>1-100</sub>, (C<sub>10-80</sub> arylalkyl urea)<sub>1-100</sub>, (C<sub>2-50</sub> alkyl amide)<sub>1-100</sub>, (C<sub>7-60</sub> aryl amide)<sub>1-100</sub>, (C<sub>8-70</sub> alkylaryl amide)<sub>1-100</sub>, (C<sub>8-70</sub> arylalkyl

amide)<sub>1-100</sub>, (C<sub>3-30</sub> alkyl anhydride)<sub>1-100</sub>, (C<sub>8-50</sub> aryl anhydride)<sub>1-100</sub>, (C<sub>9-60</sub> alkylaryl anhydride)<sub>1-100</sub>, (C<sub>9-60</sub> arylalkyl anhydride)<sub>1-100</sub>, (C<sub>2-30</sub> alkyl carbonate)<sub>1-100</sub>, (C<sub>7-50</sub> aryl carbonate)<sub>1-100</sub>, (C<sub>8-60</sub> alkylaryl carbonate)<sub>1-100</sub>, (C<sub>8-60</sub> arylalkyl carbonate)<sub>1-100</sub>, -R<sub>1</sub>-O-CO-NH-(R<sub>2</sub> or Ar-R<sub>2</sub>-Ar)-NH-CO-O-(C<sub>1-30</sub> alkyl ether, C<sub>6-40</sub> aryl ether, C<sub>7-60</sub> alkylaryl ether, or C<sub>7-60</sub> arylalkyl ether)<sub>1-100</sub>, -R<sub>1</sub>-O-CO-NH-(R<sub>2</sub> or Ar-R<sub>2</sub>-Ar)-NH-CO-O-(C<sub>2-50</sub> alkyl ester, C<sub>7-60</sub> aryl ester, C<sub>8-70</sub> alkylaryl ester, or C<sub>8-70</sub> arylalkyl ester)<sub>1-100</sub>, -R<sub>1</sub>-O-CO-NH-(R<sub>2</sub> or Ar-R<sub>2</sub>-Ar)-NH-CO-O-(C<sub>1-30</sub> alkyl ether, C<sub>6-40</sub> aryl ether, C<sub>7-60</sub> alkylaryl ether, or C<sub>7-60</sub> arylalkyl ether)<sub>1-100</sub>-CO-NH-(R<sub>2</sub> or Ar-R<sub>2</sub>-Ar)-NH-CO-O-, -R<sub>1</sub>-O-CO-NH-(R<sub>2</sub> or Ar-R<sub>2</sub>-Ar)-NH-CO-O-(C<sub>2-50</sub> alkyl ester, C<sub>7-60</sub> aryl ester, C<sub>8-70</sub> alkylaryl ester, or C<sub>8-70</sub> arylalkyl ester)<sub>1-100</sub>-R<sub>3</sub>-O-CO-NH-(R<sub>2</sub> or Ar-R<sub>2</sub>-Ar)-NH-CO-O-, -R<sub>1</sub>-NH-CO-NH-(R<sub>2</sub> or Ar-R<sub>2</sub>-Ar)-NH-CO-O-(C<sub>1-30</sub> alkyl ether, C<sub>6-40</sub> aryl ether, C<sub>7-60</sub> alkylaryl ether, or C<sub>7-60</sub> arylalkyl ether)<sub>1-100</sub>, -R<sub>1</sub>-NH-CO-NH-(R<sub>2</sub> or Ar-R<sub>2</sub>-Ar)-NH-CO-(C<sub>2-50</sub> alkyl ester, C<sub>7-60</sub> aryl ester, C<sub>8-70</sub> alkylaryl ester, or C<sub>8-70</sub> arylalkyl ester)<sub>1-100</sub>, -R<sub>1</sub>-NH-CO-NH-(R<sub>2</sub> or Ar-R<sub>2</sub>-Ar)-NH-CO-O-(C<sub>1-30</sub> alkyl ether, C<sub>6-40</sub> aryl ether, C<sub>7-60</sub> alkylaryl ether, or C<sub>7-60</sub> arylalkyl ether)<sub>1-100</sub>-CO-NH-(R<sub>2</sub> or Ar-R<sub>2</sub>-Ar)-NH-CO-O-, -R<sub>1</sub>-NH-CO-NH-(R<sub>2</sub> or Ar-R<sub>2</sub>-Ar)-NH-CO-O-(C<sub>2-50</sub> alkyl ester, C<sub>7-60</sub> aryl ester, C<sub>8-70</sub> alkylaryl ester, or C<sub>8-70</sub> arylalkyl ester)<sub>1-100</sub>-R<sub>3</sub>-O-CO-NH-(R<sub>2</sub> or Ar-R<sub>2</sub>-Ar)-NH-CO-O-, -R<sub>1</sub>-O-CO-NH-(R<sub>2</sub> or Ar-R<sub>2</sub>-Ar)-NH-CO-NH-(C<sub>2-50</sub> alkyl amide, C<sub>7-60</sub> aryl amide, C<sub>8-70</sub> alkylaryl amide, or C<sub>8-70</sub> arylalkyl amide)<sub>1-100</sub>, or -R<sub>1</sub>-NH-CO-NH-(R<sub>2</sub> or Ar-R<sub>2</sub>-Ar)-NH-CO-NH-(C<sub>2-50</sub> alkyl amide, C<sub>7-60</sub> aryl amide, C<sub>8-70</sub> alkylaryl amide, or C<sub>8-70</sub> arylalkyl amide)<sub>1-100</sub>; wherein each of R<sub>1</sub>, R<sub>2</sub>, and R<sub>3</sub>, independently, is C<sub>1-30</sub> alkyl; and Ar is aryl;

K is -H, -[N(X)-C<sub>6</sub>H<sub>4</sub>]<sub>1-3</sub>-NH<sub>2</sub>, -[N(X)-C<sub>6</sub>H<sub>4</sub>]<sub>1-3</sub>-NH-C(=S)-SH, -[N(X)-C<sub>6</sub>H<sub>4</sub>]<sub>1-3</sub>-N=CH-Ar-SH, or -[N(X)-C<sub>6</sub>H<sub>4</sub>]<sub>1-3</sub>-NH-CO-Ar-SH, wherein X is -H, -Z, -CH<sub>2</sub>-CO-OH, -CH<sub>2</sub>-CO-O-Z, -CH<sub>2</sub>-CO-S-Z, -CH<sub>2</sub>-CO-NH<sub>2</sub> or -CH<sub>2</sub>-CO-NH-Z; and Ar is aryl; and a pharmaceutically acceptable carrier

19. (Original) The pharmaceutical composition of claim 18, wherein A is -Z, -CH<sub>2</sub>-CO-O-Z, -CH<sub>2</sub>-CO-S-Z, or -CH<sub>2</sub>-CO-NH-Z; E is -R- or -R-Ar-; and D is -OH, -SH, -NH<sub>2</sub>, -NHOH, -SO<sub>3</sub>H, -OSO<sub>3</sub>H, -CO<sub>2</sub>H, -CONH<sub>2</sub>, -CH(NH<sub>2</sub>)-CO<sub>2</sub>H, -P(OH)<sub>3</sub>, -PO(OH)<sub>2</sub>, -O-PO(OH)<sub>2</sub>, -O-PO(OH)-O-PO(OH)<sub>2</sub>, or -NH<sub>3</sub><sup>+</sup>.

20. (Original) The pharmaceutical composition of claim 19, wherein A is -Z; E is -R-; and D is -SO<sub>3</sub>H, -OSO<sub>3</sub>H, -CO<sub>2</sub>H, -CH(NH<sub>2</sub>)-CO<sub>2</sub>H, -P(OH)<sub>3</sub>, -PO(OH)<sub>2</sub>, -O-PO(OH)<sub>2</sub>, or -O-PO(OH)-O-PO(OH)<sub>2</sub>.

21. (Original) The pharmaceutical composition of claim 20, wherein E is -C<sub>3</sub>H<sub>6</sub>-; D is -SO<sub>3</sub>H; n is an integer of 1-6; m is an integer of 2-6; and each of W, X, and K is H.

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